

**REMARKS**

Reconsideration is respectfully requested.

This Response is submitted in response to the non-final Office Action having a mailing date of May 25, 2010, setting forth a three month period for reply. This Response constitutes Applicants' response to the Office Action.

Claims 1, 2, 4-9, 11-13, 28, 37, 41 and 42 are pending. Claims 3, 10, 14-27, 29-36 and 38-40 were previously cancelled. Upon entry of this Response, claims 1, 2, 4-9, 11-13, 28, 37, 41 and 42 will remain pending.

Applicants have not publicly dedicated or abandoned any unclaimed subject matter, and have not acquiesced to any rejections made by the Office in this, or any prior, Office Action. Applicants reserve the right to pursue prosecution of any presently or previously excluded or cancelled claim embodiments in one or more future continuation and/or divisional applications.

**35 U.S.C. § 103(a)**

Claims 1, 2, 4-9, 11-13, 28, 37, 41 and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Guttuso (U.S. Patent No. 6,310,098 B1, mis-identified by the Office as U.S. Patent No. 6,510,098 B1), in view of Gallop *et al.* (International Publication No. WO 02/100347 A2). The Office argues that Guttuso teaches a method of treating hot flashes in a patient by providing a GABA analog or salt thereof, wherein the analog includes gabapentin or pregabalin. The Office further argues that Gallop teaches GABA analogs, including gabapentin and pregabalin analogs, and that Gallop exemplifies 1-[( $\alpha$ -isobutanoyloxyethoxy)carbonyl]-aminomethyl}-1-cyclohexane acetic acid as one of the analogs effective for treating or prevention common diseases and/or disorders treatable with GABA analogs.

To establish *prima facie* obviousness of the subject matter of one or more claims, the Office must make "a finding that the prior art included each element claimed ... with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements." *M.P.E.P.* § 2143(A)(1), Rev. 6, Sept. 2007, p.2100-129; *see also In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *and CFMT, Inc. v. YieldUp Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *MPEP* § 2143.03, p. 2100-142, Rev. 6, Sept. 2007 (citing *In re*

*Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Claimed subject matter is unpatentable only if the differences between it and the cited references “are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a). “For a chemical compound, a *prima facie* case of obviousness requires ‘structural similarity between claimed and prior art subject matter . . . where the prior art gives reason or motivation to make the claimed compositions.’” *Yamanouchi Pharmaceutical Co., Ltd. V. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 1343 (Fed. Cir. 2000), quoting *In re Dillon*, 919 F.2d 688, 692 (Fed. Cir 1990) (en banc).

The U.S. Supreme Court has stated that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 at 416, 82 USPQ2d 1385 at 1739 (2007). In some cases there may be a motivation to combine familiar elements and the Supreme Court, in *KSR*, recognized that a teaching, suggestion, or motivation (TSM) test is but “one of a number of valid rationales that could be used to determine obviousness.” *M.P.E.P.* § 2141, Rev. 6, Sept. 2007, p. 2100-118. Thus, while not controlling, “[a]ccording to the Supreme Court, establishment of the TSM approach to the question of obviousness ‘captured [*sic*, captures] a helpful insight.’” *Id.* at 2100-119, quoting *KSR*, 550 U.S. at 401, 82 USPQ2d at 1731.

Those of skill in the art would not be motivated to treat hot flashes by administering an effective amount of 1-{{[( $\alpha$ -isobutanoyloxyethoxy)carbonyl]-aminomethyl}-1-cyclohexane acetic acid or a pharmaceutical salt thereof. In view of Guttuso, and confronted with the problem of identifying alternative or improved treatments for hot flashes, the skilled person has numerous options available for treating hot flashes. For example, Guttuso states that:

[e]xemplary GABA analogs and their salts have been described in U.S. Pat. No. 4,024,175 to Satzinger et al., U.S. Pat. No. 5,563,175 to Silverman et al., Bryans et al., ‘Identification of Novel Ligands for the Gabapentin Binding Site on the  $\alpha_2\delta$  Subunit of a Calcium Channel and Their Evaluation as Anticonvulsant Agents,’ J. Med. Chem. 41:1838-1845 (1998), and Bryans et al., ‘3-Substituted GABA Analogs with Central Nervous System Activity: A Review,’ Med. Res. Rev. 19:149-177 (1999), which are hereby incorporated by reference. GABA analogs which are preferred for use according to the methods of the present invention include, without limitation, gabapentin and pregabalin.  
Guttuso, Col. 3 lines 9-21.

Guttuso further describes several additional GABA analogs:

cis-(1S,3R)-(1-(aminomethyl)-3-methylcyclohexane)acetic acid, cis-(1R,3S)-(1-(aminomethyl)-3-methylcyclohexane)acetic acid, 1 $\alpha$ ,3 $\alpha$ ,5 $\alpha$ -(1-aminomethyl)-(3,5-dimethylcyclohexane)acetic acid, (9-(aminomethyl)bicyclo[3.3.1]non-9-yl)acetic acid, and (7-(aminomethyl)bicyclo[2.2.1]hept-7-yl)acetic acid (Bryans et al., "Identification of Novel Ligands for the Gabapentin Binding Site on the  $\alpha$ .sub.2.delta. Subunit of a Calcium Channel and Their Evaluation as Anticonvulsant Agents," J. Med. Chem. 41:1838-1845 (1998); Bryans et al., "3-Substituted GABA Analogs with Central Nervous System Activity: A Review," Med. Res. Rev. 19:149-177 (1999), which is hereby incorporated by reference).  
Guttuso, Col. 3 lines 46-61.

Guttuso thus describes numerous compounds for treating hot flashes, including, "without limitation, gabapentin and pregabalin." Guttuso, Col. 3 lines 9-21.

Gallop discloses a wide range of gabapentin and pregabalin prodrugs. Gallop provides numerous examples of gabapentin prodrugs in Examples 1-31 and 35-41, and numerous examples of pregabalin prodrugs in Examples 32-35. However, Gallop is silent with respect to treating hot flashes.

Against this backdrop, the skilled artisan would not select 1- $\{[(\alpha$ -isobutanoyloxyethoxy)carbonyl]-aminomethyl}-1-cyclohexane acetic acid to treat hot flashes from among the myriad of possibilities disclosed in the combined Guttuso and Gallop references. First, the skilled artisan would not be motivated to look beyond the numerous options for treating hot flashes provided by Guttuso. Guttuso discloses gabapentin and pregabalin as preferred treatments for hot flashes (*see, e.g.*, page 4, lines 3-6, and page 5, lines 4-6 of Guttuso), and one skilled in the art would not be motivated to seek alternatives to gabapentin or pregabalin.

The skilled artisan further would not be motivated to look to the compounds described in Gallop to treat hot flashes because Gallop does not disclose, mention, or hint at treating hot flashes. One of skill in the art would look in a reference that described GABA analogs for treating hot flashes. Even if the skilled artisan were to look to Gallop, the skilled artisan would not select the specific compound 1- $\{[(\alpha$ -isobutanoyloxyethoxy)carbonyl]-aminomethyl}-1-cyclohexane acetic acid from among all the numerous possibilities disclosed in Gallop. As a result, it would not be obvious to use 1- $\{[(\alpha$ -isobutanoyloxyethoxy)carbonyl]-aminomethyl}-1-

cyclohexane acetic acid to treat hot flashes. The claimed subject matter is clearly not obvious over the disclosures of Guttuso and Gallop.

In view of the foregoing, Applicants request the withdrawal of this ground for rejection.

### **CONCLUSION**

In view of the foregoing remarks, Applicants submit that the rejection under 35 U.S.C. § 103(a) has been overcome and that the claims are directed to patentable subject matter. Applicants therefore request the Office's reconsideration of the application and the timely allowance of the claims.

This Response is being submitted concurrently with a request for a 3-month extension of time in which to provide a response, together with the requisite fee, thereby extending the period of response from August 25, 2010 to November 25, 2010. Applicants believe that no additional fees or petitions are due for the filing of this Response. However, should any such fees or petitions be required, the Commissioner is authorized to charge such fees to Dorsey & Whitney LLP Deposit Account No. 04-1415.

If the Office believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-629-3400.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Walker', is written over a horizontal line.

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